### Profiling the Leading Causes of Death in the United States

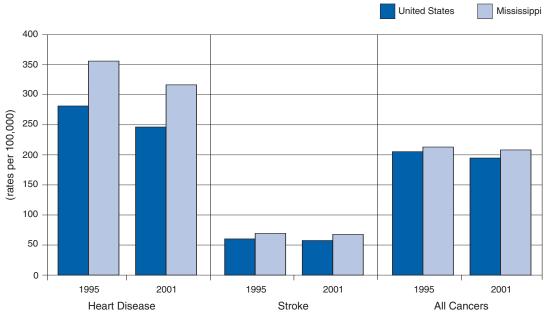
Heart Disease, Stroke, and Cancer



## **Chronic Diseases: The Leading Causes of Death**

### The Leading Causes of Death

United States and Mississippi, 1995 and 2001



#### Source: National Center for Health Statistics, 2003

#### The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

### **Reducing the Burden of Chronic Disease**

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.



### The Leading Causes of Death and Their Risk Factors

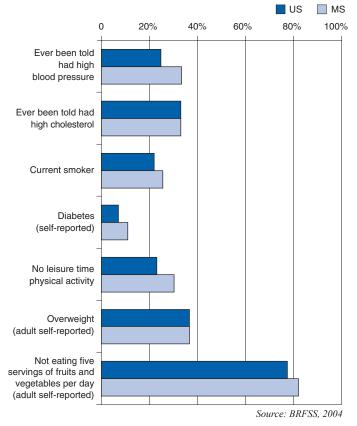
#### **Heart Disease and Stroke**

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Mississippi, accounting for 9,050 deaths or approximately 32% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 1,935 deaths or approximately 7% of the state's deaths in 2001.

#### **Prevention Opportunities**

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

#### Risk Factors for Heart Disease and Stroke, 2003



#### Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 6,230 are expected in Mississippi. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 15,120 new cases that are likely to be diagnosed in Mississippi.

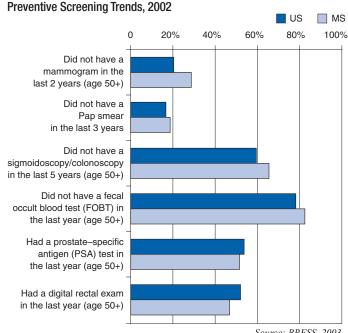
#### Estimated Cancer Deaths, 2004

Cause of death	US	MS
All Cancers	563,700	6,230
Breast (female)	40,110	460
Colorectal	56,730	620
Lung and Bronchus	160,440	2,060
Prostate	29,900	440

Source: American Cancer Society, 2004

#### **Prevention Opportunities**

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.



Source: BRFSS, 2003





## Mississippi's Chronic Disease Program Accomplishments

# **Examples of Mississippi's Prevention Successes**

- A 25.3% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 54.0% in 1992 to 28.7% in 2002).
- A decrease in the percent of women who reported not having had a Pap smear in the last 3 years from 19.9% in 1992 to 18.7% in 2002 and a 2.1% change in the cervical cancer death rate from 1997 to 2001.
- A lower mortality rate than the corresponding national rate for prostate cancer among white non-Hispanic men (27.9% in Mississippi versus 28.1% nationally).

# **CDC's Chronic Disease Prevention and Health Promotion Programs**

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Mississippi in the areas of cancer, heart disease, stroke, and related risk factors.

#### CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Mississippi, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS)  Mississippi BRFSS	\$174,364
National Program of Cancer Registries  Mississippi Central Cancer Registry	\$343,367
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program Know Your Numbers (KYN) Campaign Task Force on Heart Disease and Stroke Prevention Mississippi Council on Obesity Prevention and Management	\$394,991
Diabetes Control Program  Diabetes Advisory Council	\$300,000
National Breast and Cervical Cancer Early Detection Program  Mississippi Breast and Cervical Cancer Early Detection Program	\$786,881
National Comprehensive Cancer Control Program  Mississippi Comprehensive Cancer Control Program	\$150,000
WISEWOMAN	\$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program Mississippi Tobacco Prevention and Control Program	\$172,818
State Nutrition and Physical Activity/Obesity Prevention Program	\$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	\$0
Total	\$2,322,421

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

#### **Additional Funding**

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Mississippi that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.





## **Opportunities for Success**

# Chronic Disease Highlight: Cardiovascular Disease

Mississippi's cardiovascular disease (CVD) mortality rate is the highest in the nation; in 2000, the state's CVD mortality rate was 29% higher than that of the United States. More Mississippians die each year from CVD than from all types of cancer, traffic injuries, suicides, and AIDS combined. In addition, 1 in 5 Mississippians under 65 died of CVD.

In 2001, Mississippi had the highest heart disease death rate in the nation and the 5th highest stroke death rate. Between 1996 and 2000, Mississippi had a heart disease rate that was higher than the national average (707 per 100,000, compared with 536 per 100,000). In addition, between 1991 and 1998, Mississippi had a stroke death rate that was higher than the national average (140 per 100,000 compared with 121 per 100,000).

As the state's population ages, the economic impact of CVD on Mississippi's health care system continues to grow. In 2001, the estimated cost of CVD in Mississippi was about \$3.7 billion.

Smoking, obesity and physical activity are three risk factors that are modifiable through behavior change. According to 2003 data from CDC's Behavioral Risk Factor Surveillance System, more than a quarter of adults and almost a quarter of high school students in Mississippi smoked. In addition, Mississippi had one of the highest obesity rates in the nation (28.1% compared with 22.1% nationally). Almost one third of adults (30.3%) in Mississippi also reported that they did not participate in any leisure time physical activity during the past month, compared with the national average of 23.1%.

Mississippi has created several programs to address CVD. The Mississippi Cardiovascular Health Program (MCVH) and the Mississippi Chronic Illness Coalition (MCIC) developed and implemented the Know Your Numbers (KYN) media campaign, which encourages Mississippians to monitor their blood pressure, cholesterol, glucose, and body mass index. The state's Task Force on Heart Disease and Stroke Prevention and the Mississippi Council on Obesity Prevention and Management, created through passage of legislation developed by MCIC partners, were organized to develop a comprehensive statewide plan to address these critical public health problems.

Text adapted from the Mississippi Department of Health Web site: http://www.msdh.state.ms.us/msdhsite/index.cfm/43,0,91,149,html.

### **Disparities in Health**

African Americans make up approximately 38% of Mississippi's population. They have a higher stroke mortality rate than other groups, as well as a higher prevalence of the risk factors for heart disease. Historically, Mississippi has reported the lowest per capita income and median family income of any state in the nation, with corresponding high unemployment and low educational levels. Nationally, African Americans tend to have higher poverty rates and Mississippi is no different. These economic disparities translate into health disparities for Mississippi's African Americans.

Heart disease has been the leading cause of death for African Americans in Mississippi for many years, followed by cancer and stroke. Between 1996 and 2000, African Americans had a higher heart disease death rate than their white counterparts (823 per 100,000, compared with 667 per 100,000). In 2000, African American men had a cancer death rate that was higher than white men (366.6 per 100,000, compared with 282.0 per 100,000) and African American women had a higher cancer death rate than white women (186.3 per 100,000, compared with 167.5 per 100,000). Stoke death rates in Mississippi between 1991 and 1998 also were higher among African Americans (183 per 100,000) than whites (125 per 100,000).

African Americans in Mississippi also have higher rates of the risk factors for CVD and cancer, including obesity, physical inactivity, and hypertension. According to 2003 data from CDC's Behavioral Risk Factor Surveillance System, African Americans were more likely to be obese (36.6%), compared with whites (24.1%). In addition, African Americans were less likely to report having participated in leisure time physical activity during the last month (34.4% versus 27.8%). African Americans in Mississippi also were more likely to report having been told that they had high blood pressure than whites (39.7%, compared with 30.4%).

#### **Other Disparities**

- **Diabetes:** In Mississippi, African Americans are almost twice as likely as their white counterparts to have been told by a doctor that they have diabetes (15% for African Americans versus 9% for whites).
- Cholesterol Screening: Approximately 29% of African Americans in Mississippi report that they have never had their blood cholesterol checked, compared with 24% of their white counterparts.

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